## **Class exercise: Running CFA in Stata**

Objective: Running Confirmatory Factor Analysis using Stata

Data: Taiwan Election and Democratization Study (TEDS) 2012 data (use "https://github.com/kho777/stata/blob/master/SEM/TEDS2012SEM.dta?raw=true")

- 1. Open TEDS 2012 data in Stata
- 2. Examine the variables (poltalk, polnetsize, heteronet and pstrength) using sum, tab and corr.
- 3. Run EFA using factor
- 4. SEM Builder:
  - a. Statistics → SEM (Structural equation modeling) → Model Building and Estimation
  - b. Build a CFA using the four variables
    - One latent construct using eclipse, named it ENDOW
    - ii. Four indicators using boxes
    - iii. Connect the eclipse and boxes using path arrows (make sure the directions are correct)
    - iv. Double click the boxes and specify variables
  - c. Run estimation
  - d. Check model fit (Estimation → Goodness of fit)
- 5. Can you improve the model fit by reviewing modification indices?
- 6. Add another indicator. Make sure you have a theory behind that new model.

